

Claims.

1. Construction element for forming a reinforced concrete slab (2), consisting of the combination of  
5 at least a hardened concrete layer (3), at least a number of reinforcement elements (4) and elements (5) extending at least partially from the concrete layer (3) and defining cavities (6), whereby these elements (5) are designed to be covered with  
10 concrete (7) at a later stage, characterised in that the above-mentioned elements (5) defining the cavities (6) consist of elements (5) which can be mutually nested as such.
- 15 2. Construction element according to claim 1, characterised in that the above-mentioned elements (5) can be nested in each other for at least 50%, and better still for at least 75%.
- 20 3. Construction element according to claim 1 or 2, characterised in that the above-mentioned elements (5) have one or several of the following qualities:
  - that they are made mainly conical;
  - 25 - that they consist of one or several side walls (13) and a top wall (12), while they are open on the bottom side;
  - that they have the shape of a flower pot which has been turned upside down;
  - 30 - that they are each provided with at least one air hole (14);
  - that they are each made in one piece;

- that they are made of plastic or another usable material, such as for example compressed waste of tetra-bricks, resin-bonded fibres or the like;
- that they are circular in the horizontal cross section;
- that they are provided with locking parts at the bottom which are designed to be embedded in the concrete layer (3), thereby either or not catching behind reinforcement elements (4) which are also embedded in this concrete layer (3).

4. Construction element according to any of the preceding claims, characterised in that the above-mentioned elements (5) are situated in the concrete of the hardened concrete layer (3) with a lower part thereof.

5. Construction element according to any of the preceding claims, characterised in that the above-mentioned elements (5) are anchored to the construction element (1), only via a part thereof with which they are situated in the concrete layer (3).

6. Construction element according to claim 5, characterised in that the above-mentioned elements (5) are anchored to the construction element (1) in such a way that they at least remain anchored against floating and possible other forces when liquid concrete or cast concrete (7) is poured over them.

7. Construction element according to claim 5 or 6, characterised in that the above-mentioned anchoring is obtained by means of locking parts provided on the hollow elements (5), whereby these locking parts at least consist of a laterally extending collar (15).

8. Construction element according to any of the preceding claims, characterised in that the above-mentioned elements (5) are erected in rows in orthogonal directions.

9. Construction element according to any of the preceding claims, characterised in that it comprises supporting means for a top reinforcement (16), whereby these supporting means define supporting parts (17) which are situated higher than the top sides of the above-mentioned elements (5).

10. Construction element according to claim 15, characterised in that the supporting parts (17) are formed of reinforcement rods (11) extending mainly parallel to the above-mentioned concrete layer (3).

11. Construction element according to any of the preceding claims, characterised in that reinforcement elements (4) are present in the above-mentioned concrete layer (3) and in that the above-mentioned elements (5) are anchored in the concrete layer (3) without thereby making any contact with said reinforcement elements (4).

12. Construction element for forming a reinforced concrete slab (2), consisting of the combination of at least a hardened concrete layer (3), at least a number of reinforcement elements (4) and elements (5) extending at least partially from the concrete layer (3) and defining cavities (6), whereby these elements (5) are designed to be covered with concrete (7) at a later stage, characterised in that the above-mentioned elements (5) are anchored to the construction element (1), only via a part thereof with which they rest in the concrete layer (3), being thereby either or not locked to the reinforcement which has been embedded in said concrete layer (3), by means of an anchoring which is so solid that said elements (5) will at least stay anchored against floating when liquid concrete or cast concrete (7) is poured over them.

13. Construction element for forming a reinforced concrete slab (2), consisting of the combination of at least a hardened concrete layer (3), at least a number of reinforcement elements (4) and elements (5) extending at least partially from the concrete layer (3) and defining cavities (6), whereby these elements (5) are designed to be covered with concrete (7) at a later stage, characterised in that the construction element (1) comprises supporting means for a top reinforcement (16), whereby these supporting means define supporting parts (17) which are situated higher than the top sides of the aforesaid hollow elements (5).

14. Method for manufacturing a construction element (1) according to any of claims 1 to 13, characterised in that it at least consists of pouring an amount of concrete in a mould (18) in order to form the  
5 above-mentioned concrete layer (3); in providing the concrete layer (3) with a reinforcement, in particular reinforcement elements (4), provided in the mould (18) before and/or after the concrete has been poured; in providing hollow elements (5) in  
10 the concrete before it has hardened, which are provided with locking parts at their bottom sides, so that they rest in the concrete at least with these locking parts; and in letting the concrete harden, after which the whole is removed from the  
15 above-mentioned mould (18).

15. Method according to claim 14, characterised in that the hollow elements (5) are taken automatically from a stock of such elements (5) and are  
20 automatically provided in the concrete with the above-mentioned locking parts, such by means of a vibrating motion.